

## Abstract

[0130] A demultiplexer is described that includes an optical splitter that receives an optical data signal having a plurality of data channels and that generates a plurality of identical optical data signals. An electrical clock recovery circuit receives the optical data signal and generates an electrical clock signal that is synchronized to the optical data signal and that has a frequency that is an integer multiple of a bit rate of one of the plurality of data channels. One of a plurality of phase shifters receives the electrical clock signal and generates a phase-shifted electrical clock signal in response to a control signal applied to one of the plurality of phase shifters. A respective one of a plurality of sampling circuits receives one of the identical optical data signals and the phase-shifted electrical clock signal and generates an electrical signal representing a data channel of the optical data signal.

PTX-018 Final